



# KM D Accessories

Solution-D





## Elastic Suspensions



### Elastic Suspension EA 2124 A mt

The EA 2124 A mt is able to accept microphones from 21 to 24 mm in diameter. It has a swivel mount with a 5/8"-27 female thread, plus a thread adapter to connect to 1/2"- and 3/8" stands.

EA 2124 A mt ..... blk ..... Cat. No. 008433

## Table and Floor Stands



### Table Stand MF 2

Small table stand with brass base, very sturdy. It has a black matte finish. The bottom is fitted with a non-slip rubber disk. The stand has a 1/2" threaded stud for mounting the SG 21/17 mt, for example. The rubber shock mount between the stud and the base serves to suppress structure-borne noise. Ø 60 mm, Weight 340 g.

MF 2 ..... blk ..... Cat. No. 007266



### Floor Stand MF 5

Floor stand with grey soft-touch powder coating. It has a non-skid sound-absorbing rubber ring attached to the bottom. The stand connection has a 3/8" thread. Weight 2.7 kg, Ø 250 mm.

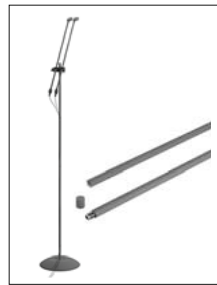
MF 5 ..... gr ..... Cat. No. 008489



### Table Stand MF 3

The MF 3 is a table stand with iron base, 1.6 kg in weight, 110 mm in diameter. It has a black matte finish. The bottom is fitted with a non-slip rubber disk. The stand comes with a reversible stud and an adapter for 1/2" and 3/8" threads.

MF 3 ..... blk ..... Cat. No. 007321



### Vertical Bar MZEF 8060/8120 (Sennheiser)

The MZEF ... vertical bars are screwed onto microphone stands (e.g. MF 4, MF 5). They have a length of 600 or 1200 mm, with 3/8" threads. Ø 12 mm.

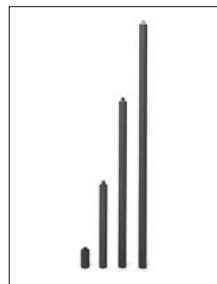
MZEF 8060 ..... nx ..... Cat. No. 502318  
MZEF 8120 ..... nx ..... Cat. No. 502319



### Floor Stand MF 4

Floor stand with grey cast iron base. The floor stand has a matte black finish and rests on a non-skid rubber disk attached to the bottom. A reversible stud and a reducer for 1/2" and 3/8" threads are also supplied. Weight 2.6 kg, Ø 160 mm.

MF 4 ..... blk ..... Cat. No. 007337



### Stand Extensions STV 4/20/40/60

The STV... stand extensions are screwed between microphone stands (for example MF 4, MF 5) and swivel mounts (for example SG 21/17 mt).

Length 40, 200, 400 or 600 mm. Ø 19 mm.

STV 4 ..... blk ..... Cat. No. 006190  
STV 20 ..... blk ..... Cat. No. 006187  
STV 40 ..... blk ..... Cat. No. 006188  
STV 60 ..... blk ..... Cat. No. 006189

## Auditorium Hangers



### Auditorium Hanger MNV 21 mt

The auditorium hanger adjusts the tilting angle of a microphone suspended by its own cable. The MNV 21 consists of the tilting clamp, suitable to hold a Neumann miniature microphone or KMR 81, and a locking cable strain relief. Suitable for cables with 4–5 mm diameter.

MNV 21 mt ..... blk ..... Cat. No. 006802



### Auditorium Hanger MNV 100

The MNV 100 auditorium hanger is used to suspend a detached miniature microphone capsule freely from its interconnecting cable. The assembly can be rotated and tilted to any desired angle. Suitable for cables with 3–3.5 mm diameter.

MNV 100 ..... blk ..... Cat. No. 006811



### Auditorium Hanger MNV 87 (mt)

The auditorium hanger consists of a cable suspension and a rotating 1/2" threaded stud, to connect to e. g. swivel mounts. The stud is screwed into the threaded coupling of the swivel mount. Then the microphone can be tilted while it is suspended from its own cable. Suitable for cables with 4–8 mm diameter.

MNV 87 ..... ni ..... Cat. No. 006804

MNV 87 mt ..... blk ..... Cat. No. 006806

## Stand Mounts and Miscellaneous Mechanical Adapters



### Double Mount DS 120

The DS 120 has a 150 mm long support bar with two movable 1/2" threaded studs. Two microphones in their mounts can be attached. Any space or angle between the microphones is freely adjustable. The DS 120 has a 5/8"-27 female thread, plus a thread adapter to connect to 1/2"- and 3/8" stands.

DS 120 ..... blk ..... Cat. No. 007343



### Stand Mount MZGE 8000 (Sennheiser)

Stand mount to attach one KVG ... capsule extension to MZEF ... vertical bars.

MZGE 8000 ..... nx ..... Cat. No. 502324



### Stand Mount SG 21 bk

Swivel mount with a plastic clamp for miniature microphones. It has a 5/8"-27 female thread, plus a thread adapter to connect to 1/2"- and 3/8" stands.

SG 21 bk ..... blk ..... Cat. No. 008613



### Stand Mount MZGE 8002 (Sennheiser)

Stand mount to attach two KVG ... capsule extensions to MZEF ... vertical bars.

MZGE 8002 ..... nx ..... Cat. No. 502325



## Stand Mounts and Miscellaneous Mechanical Adapters



### Stand Mount SG 109

Swivel mount for detached miniature microphone capsules. It has a 3/8" thread.

SG 109 ..... blk ..... Cat. No. 008614



### Stereo Mount STH 100

Stereo mount with a swivel mount and two holders, for two detached miniature microphone capsules. Two stereo recording methods are then possible.

One holder enables the microphone setup according to the "ORTF Method": Two detached capsules are snapped into the clamps at the end of the holder. The distance between diaphragms is then 170 mm, with an angle of 110°.

The other pair of holders allows stereo setups according to the "Coincidence Method": Capsules are installed acoustically at one point in space, however, freely adjustable to any angle between 30° and 180°.

The swivel mount has a 5/8"-27 thread, plus a thread adapter to connect to 1/2"- and 3/8" stands.

STH 100 ..... blk ..... Cat. No. 007315



### Swivel Joint SG 110 nx

The SG 110 nx swivel mount can be inserted between KK 1... capsules and the KM D output stage. The capsule can then be swiveled and orientated through ± 110°. In combination with an elastic suspension and a table flange, a mechanically decoupled, unobtrusive setup can be realised, e.g. for TV news announcers. Length 60 mm, Ø 22 mm.

SG 110 nx ..... nx ..... Cat. No. 008611



### Stand Mount SGE 100

Swivel mount for detached miniature microphone capsules. A rubber shock mount suppresses structure-borne noise. The swivel mount has an M 6 thread (6 mm). Attaching the swivel mount to the MF 2 table stand, the SGE 100 replaces the rubber shock mount of the table stand.

SGE 100 ..... blk ..... Cat. No. 006742



### Stereo Mount STH 120

The STH 120 stereo mount accepts two detached miniature microphone capsules, parallel and one above the other for MS stereo recordings. It is rotatable and swivelable. The swivel mount has a 5/8"-27 thread, plus a thread adapter to connect to 1/2"- and 3/8" stands.

STH 120 ..... blk ..... Cat. No. 008422

## Popscreens

Pop screens provide excellent suppression of so-called pop noise, such as "p" or "t". They consist of a round, thin frame covered with black gauze on both sides. A gooseneck of about 30 cm (12") in

length is mounted at the popshield. It will be attached to microphone stands by means of a clamp with a knurled screw.



### Popscreen PS 15

The frame is 15 cm in diameter.

PS 15 ..... blk ..... Cat. No. 008472

## Foam Windscreens

Close range sounds, wind, and fast movements of the microphone boom, all may cause interfering noises. To avoid these unwanted sounds, windscreen accessories are available. Typically, they are made out of open-cell polyurethane foam. These windscreens do not cause interfering resonances and do not influence the direc-

tional pattern. Only in the upper frequency range is the output level slightly attenuated. The wind noise attenuation was measured without electrical filtering in a turbulent air stream traveling at 20 km/h, generated by a noiseless wind machine.



### Windscreen WNS 100

Windscreen for KM miniature microphones. Wind noise attenuation 18 dB. Attenuation at 15 kHz 2 dB. Ø 45 mm.

WNS 100 ..... black ..... Cat. No. 007323  
 WNS 100 ..... red ..... Cat. No. 007324  
 WNS 100 ..... green ..... Cat. No. 007325  
 WNS 100 ..... yellow ... Cat. No. 007326  
 WNS 100 ..... blue ..... Cat. No. 007327  
 WNS 100 ..... white ..... Cat. No. 007328



### Windscreen WNS 110

Acoustically transparent wind and pop protection for KM miniature microphones, with improved efficiency. Wind noise attenuation 21 dB. Attenuation at 15 kHz 1 dB. Ø 45 mm, length 70 mm. Color black.

WNS 110 ..... blk ..... Cat. No. 008535



### Windscreen WNS 120

Windscreen for the microphone KM 120 (D) or the capsules AK 20/ KK 120. Wind noise attenuation 15 dB. Attenuation at 15 kHz 2 dB. Ø 48 mm, length 65 mm. Color black.

WNS 120 ..... blk ..... Cat. No. 008427



### Windscreen WS 100

Larger windscreen for KM miniature microphones. Wind noise attenuation 23 dB. Attenuation at 15 kHz approx. 4 dB. Ø 90 mm. Color black.

WS 100 ..... blk ..... Cat. No. 006751

## Connecting Cables



### Microphone Cable LC 4

The LC 4 connects detached capsules KK 1.. with the KM D output stage. Ø 3.5 mm, length 5 or 10 m.

LC 4 (5 m) ..... nx ..... Cat. No. 008606  
 LC 4 (10 m) ..... nx ..... Cat. No. 008607

Other cable lengths are available upon request!





## Capsule Extensions for Miniature Microphone System KM D

Any KVG ... capsule extension allows to use the KK 1... capsules separated from the output stage without the need for additional cables. The rigid part of the capsule extension is 8 mm in diameter.

At the capsule end, the swivel can be set through  $\pm 110^\circ$ . The KVG ... are mounted with MZGE 8000 or 8002 on MZEF ... vertical bars. Special lengths on request.



### Capsule Extension KVG 130 nx

The extended length of the KVG 130 nx is approximately 300 mm.

KVG 130 nx ..... nx ..... Cat. No. 008608



### Capsule Extension KVG 1120 nx

The extended length of the KVG 1120 nx is approximately 1200 mm.

KVG 1120 nx ..... nx ..... Cat. No. 008610



### Capsule Extension KVG 160 nx

The extended length of the KVG 160 nx is approximately 600 mm.

KVG 160 nx ..... nx ..... Cat. No. 008609

## Further Accessories for KM Miniature Microphone



### Output Stage KM D (nx)

The KM D (nx) microphone output stage is part of the modular KM D miniature microphone system. Together with a KK 1.. capsule head it constitutes a complete microphone of the KM D system. Preset frequencies 44.1, 48 and 96 kHz, other frequencies on demand.  $\varnothing$  22 mm, length 93 mm.

KM D (44.1 kHz) ..... ni ..... Cat. No. 008578  
KM D nx (44.1 kHz) .. nx ..... Cat. No. 008581  
KM D (48 kHz) ..... ni ..... Cat. No. 008579  
KM D nx (48 kHz) ..... nx ..... Cat. No. 008582  
KM D (96 kHz) ..... ni ..... Cat. No. 008580  
KM D nx (96 kHz) ..... nx ..... Cat. No. 008583



### Sound Diffraction Sphere SBK 130 A

The SBK 130 A sound diffraction sphere slips onto the KM 130, KM 131 (D) and KM 183 (D) pressure microphones. While sounds coming from the front-half space are emphasized by up to 2.5 dB between 2 kHz and 10 kHz, sounds arriving from the rear-half space are attenuated by 2.5 dB max in the range above 5 kHz. Inner  $\varnothing$  22 mm.

SBK 130 A, 22 mm blk ..... Cat. No. 008612

## Capsule Heads for Miniature Microphone System KM D

KK... capsule heads are part of the variable miniature microphone system. Together with the KM D (nx) output stage KK... capsule

heads form a complete microphone. KK 131 and KM D (nx), for example, make up the KM 131 (nx).



### Capsule Head KK 131 (nx)

KK 131 is a free-field equalized pressure transducer. The sensitivity in the free sound field is flat up to 20 kHz. In the diffuse sound field there is a roll-off above 5 kHz.

KK 131 ..... ni ..... Cat. No. 008591  
 KK 131 nx ..... nx ..... Cat. No. 008592



### Capsule Head KK 183 (nx)

KK 183 is a diffuse-field equalized pressure transducer with a free-field treble boost (approx. 7 dB at 10 kHz). The frequency response in the diffuse sound field is flat up to 10 kHz.

KK 183 ..... ni ..... Cat. No. 008566  
 KK 183 nx ..... nx ..... Cat. No. 008567



### Capsule Head KK 143 (nx)

KK 143 is a pressure gradient transducer with wide-angle cardioid characteristic. Attenuation: 4 dB at 90°, 8 dB at 135°, and 11 dB at 180°. The frequency response for sound sources within an angle of ± 90° (off axis) is parallel up to 12 kHz.

KK 143 ..... ni ..... Cat. No. 008593  
 KK 143 nx ..... nx ..... Cat. No. 008594



### Capsule Head KK 184 (nx)

KK 184 is a pressure gradient transducer with cardioid characteristic. The frequency curves are very even and parallel to 0° sound incidence. In typical usage, there is no coloration of sound over a wide pickup angle.

KK 184 ..... ni ..... Cat. No. 008568  
 KK 184 nx ..... nx ..... Cat. No. 008569



### Capsule Head KK 145 (nx)

KK 145 is a pressure gradient transducer with cardioid characteristic just like the KK 184. However, it has an acoustic bass roll-off characteristic in the free field and therefore suppresses interfering LF noise (wind, structure-borne noise).

Since proximity effect is a natural feature of pressure gradient microphones, the KK 145 appears to be optimized for a flat frequency response at a recording distance of approximately 15 cm (speech cardioid).

KK 145 ..... ni ..... Cat. No. 008595  
 KK 145 nx ..... nx ..... Cat. No. 008596



### Capsule Head KK 185 (nx)

KK 185 is a pressure gradient transducer with a hypercardioid characteristic. Attenuation of sound incidence from the side or rear is approximately 10 dB. Minimum sensitivity occurs at an angle of about 120°.

KK 185 ..... ni ..... Cat. No. 008570  
 KK 185 nx ..... nx ..... Cat. No. 008571



## Digital Microphone Interface and Power Supplies



### Digital Microphone Interface DMI-2

Equipment that supports the new AES 42 standard can process the output signals of Solution-D microphones directly. In all other cases, the DMI-2 digital microphone interface is used. The DMI-2 is a separate, two-channel device which converts the AES 42 data format supplied by the microphone into an AES/EBU signal. An eight-channel version is under development.

The DMI-2 is operated via the Neumann RCS remote control software, which is installed on a desktop or laptop computer. The computer is connected to the DMI-2 via a USB port and a USB to RS 485 interface converter. If a large number of microphones is used, several DMI-2s can be cascaded. In this case, each digital microphone interface can be addressed individually.

In addition to a word clock input and output, the DMI-2 also has an internal word clock generator. If no master word clock signal (e.g. from a mixing console) is present at the input, the DMI-2 internal word clock is used automatically to synchronize the two microphone channels, and the signal is switched to the word clock output.

External commands such as „On Air“ (red light) can be controlled via a 9-pin user port.

- 2 channels,
- Inputs: ..... XLR3F, AES 42
- Outputs: ..... XLR3M, AES/EBU, 24 bit
- Control bus: ..... RS485 via RJ 45 jack, connection to the computer's USB port via Neumann USB485 interface converter (included)
- User Port: ..... 9-pin sub-D, 3 functions per channel
- Synchronization: ..... AES 42/Mode 1 + Mode 2
- Word clock input: ..... BNC, 75 ohms
- Word clock output: ..... BNC, 75 ohms
- Selectable internal sampling rates: 44.1, 48, 88.2, 96, 176.4, 192 kHz
- External Word clock: ..... 44.1, 48, 88.2, 96, 176.4, 192 kHz or AES 11 format
- Indicators: ..... Data Valid (AES 42) and Sync Locked (Mode 2) for each channel, Power On and Ext. Word Clock
- Power supply: ..... 90-240 V, 50/60 Hz

- DMI-2 EU ..... Cat. No. 008561**
- DMI-2 UK ..... Cat. No. 008587**
- DMI-2 US ..... Cat. No. 008588**



### Connection Kit AES/EBU

The Connection Kits serve to supply power to digital microphones, which are in accordance with the AES 42 standard. The microphone audio signal is made available at the Connection Kit output in S/PDIF or AES/EBU format, depending upon the model. The remote control and synchronization capabilities of the AES 42 standard cannot be used with the Connection Kit; they are operable only with the DMI-2.

Connection Kit AES/EBU ..... Cat. No. 008584



### Connection Kit S/PDIF

The Connection Kits serve to supply power to digital microphones, which are in accordance with the AES 42 standard. The microphone audio signal is made available at the Connection Kit output in S/PDIF or AES/EBU format, depending upon the model. The remote control and synchronization capabilities of the AES 42 standard cannot be used with the Connection Kit; they are operable only with the DMI-2.

Connection Kit S/PDIF ..... Cat. No. 008585